

Original/Duplicate/Triplicate
CONTRACT CERTIFICATE
(For Other Works)

Bill Type: 1st & Final Bill

Date: 2022

Zone: BBMP, Yelahanka

Division: BBMP, Byatarayanapura

Sub-Division: Kodigehalli

Bill Received No.

Dated

Divisional

Cash Book Voucher No. Dated

Sub-Divisional

Job Code: 008-20-000053

Schedule Docket No.

Head of Account: P3602 (Special Dev works)

Est. Cost: Rs 50.00 Lakhs

INDENT NO.: 47268

Name of Work : Improvements to Govt school Building in Kodigehalli in Ward No 08

Name of Contractor and Full Address: Sri N.N.Sreenivasiah, # 2405, 2nd Cross, E Block, Opp Basketball Court, Sahakarnagar Bangalore-92

Reference to Agreement No. BBMP/EE/BTP/VO/08/2021-22

Date: 29.06.2021

Certified that the measurements were taken by me on: 30/04/2022 and recorded of Pages 499432 to 499441 of measurement Book No. 4995/19-20 and that work is satisfactorily executed.

[Signature]
Contractor

[Signature]
Officer-in-charge of work

Certified that measurement were taken by me on 30/4/2022 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Sub-Division Officer

Assistant Executive Engineer
Kodigehalli Sub Division

1) Total value of work done or supplies made as per account within

2) Deduct amount to be held in reserve being.....Percent Rs.....

3) " Balance

4) Deduct Payment:

a) Amount of previous payment as in the Office Cash Book Voucher

No.....Dated.....S.D.No.....

adjusted towards cash advance recovery of

b) Payments cost store or other material supplied.

Now made recovery of amount creditable to this /other work

Amount paid on this bill Cheque/Cash.

5) Balance being unpaid value of work done held in reserve.

6) Deduct cash advance made on the Office cash Book Voucher No.....

dated less adjustments.

7) Net amount due to or from Contractor unadjustments items.

8) Advance to Contractor for materials brought to site (as detailed) within

9) Value of Government materials supplied.

Total Amount Adjusted -

PTB	48,75,000.00
IT	48,750.00
cast	43,527.00
sgst	43,527.00
CEFA	48,750.00
CBF	4875.00
LR	26089.00
Fine	4482.00
Deduction	2,20,000.00
Net payable	46,55,000.00

Received Rs.....(in words)..... Contractor's Signature

by cash and by adjustment of Payment as per memorandum
(in final settlement of all demands)
(For use in the Office)

Witness

1

2

Dated Signature of Contractor

Paid by me by Cheque No.....Dated.....

[Signature]
Stamp

Cash Rs.....

Dated.....

Initials of Officer making payment

P 3602

Head of Account: Special Development Works @ ward

Bill Passed for Rs. 48,75,000/-

Statutory Deductions Rs. 2,20,000/- By Adjustment

Net Amount Paid Rs. 46,55,000/- By NEFT/RTGS

[Signature] C/W 18/8/22
Account Superintendent
Byatarayanapura Division BBMP

[Signature] 18/8
Executive Engineer
Byatarayanapura Division
BBMP

Sl. No.	Items grouped under sub-Heads and Sub-Works of the Estimate Description	Unit
1	Dismantling of existing structures like culverts bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications and directions of the Engineer in charge	Cum
2	Dismantling Mangalore tiles roof and stacking the material within a radius of 50 meters - - with reapers complete as per specifications and directions of the Engineer in charge	Sqm
3	Dismantling of existing structures like culverts bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications and directions of the Engineer in charge	Cum
4	Dismantling cement concrete flooring or plain cement concrete work including removing and conveying the debris to distance upto 200m (within average thickness of 15 cms) complete as per specifications and directions of the Engineer in charge	Sqm
5	Dismantling plastering and removing the debris with a lead upto 200m complete as per specifications and directions of the Engineer in charge	Sqm
6	Conveying the excavated earth, debris etc., with all lead and lifts including loading and unloading charges etc., complete as per the direction of the Engineer-in-charge.	Cum
7	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications and directions of the Engineer in charge.	cum
8	Providing and laying in position plain cement concrete of mix 1:4:8 (M7.5) with OPC cement @ 180kgs. with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications and directions of the Engineer in charge.	Cum
9	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications and directions of the Engineer in charge.	Sqm
10	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for suspended floors, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specifications and directions of the Engineer in charge.	Sqm
11	Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs. with 20mm and down size graded granite metal coarse aggregates @ 0.70 cum and fine aggregates @ 0.47cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reaffirmed 2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, column pillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc. including cost of all materials, labour, HOM of machinery, curing, complete as per specifications and directions of the Engineer in charge.	Cum
12	Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and directions of the Engineer in charge	tonne
13	Providing 20mm square M.S footrest and fixing in manhole Nos 232 00 with M 10 cement concrete block of 20x20x10cms. using 20mm and down size metal of size including cost of materials, labour charges, curing complete as per specifications and directions of the Engineer in charge	No s
14	Conveying the excavated earth, debris etc., with all lead and lifts including loading and unloading charges etc., complete as per specifications and directions of the Engineer in charge.	Cum

Previous Measurement			Present Measurement			Total Upto Date	
Qty	Rate Rs. P.	Amount	Qty	Rate Rs. P.	Amount	Qty	Cost
-	-	-	0.45	793.33	356.99 357.00	0.45	356.99 357.00
-	-	-	167.40	79.44	13298.26 ²⁵	167.40	13298.26 ²⁵
-	-	-	105.70	376.81	39828.82 ⁸¹	105.70	39828.82 ⁸¹
-	-	-	156.24	92.32	14424.08 ⁰⁷	156.24	14424.08 ⁰⁷
-	-	-	416.52	39.72	16544.17	416.52	16544.17
-	-	-	133.21	64.53	8596.04	133.21	8596.04
-	-	-	20.69	482.01	9972.79	20.69	9972.79
-	-	-	1.08	5477.1	5915.27	1.08	5915.27
-	-	-	47.34	276.97	13111.76	47.34	13111.76
-	-	-	10.89	429.41	4676.27	10.89	4676.27
-	-	-	6.66	6239.3	41553.74 ⁷³	6.66	41553.74 ⁷³
-	-	-	0.83	76183.42	63232.24	0.83	63232.24
-	-	-	4.00	296.29	1185.16	4.00	1185.16
-	-	-	20.30	66.69	1353.81	20.30	1353.81

15	Waterproofing of RCC Terrace / podium slab / toilet / utilities / water retaining structure by preparing the surface by chipping and cleaning and Grouting of Honey comb, voids, cracks / construction joints with cement slurry (1kg cement added in 10 ltr of water) added with 100gm of inorganic accelerator, followed by spraying of liquid biological modified alkaline earth silicates @ 0.40 ltr per sqm on whole surface to reduce the micro porosity and allowing it to dry, curing the surface for the silicates to penetrate deeper into the concrete and spraying waterproofing impregnate liquid containing silane and silanol linear copolymer @ 0.50 ltr per sqm and finally applying polymer slurry made out of cross linked acrylic / styrene / butadiene & cement in the ratio of 1:0.1, @0.50kg/sqm on the whole surface, including all labour charges tools and equipments, all complete as per specifications and directions of the Engineer in charge.	Sqm
16	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications.	Cum
17	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift complete as per specifications and directions of the Engineer in charge	Cum
18	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications and directions of the Engineer in charge.	Cum
19	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.43cum, with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications and directions of the Engineer in charge.	Cum
20	Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6, stone hammerdressed in courses not less than 20 cms high, bond stones at 2m apart in each course including cost of materials, labour, curing complete as per specifications and directions of the Engineer in charge.	Cum
21	Providing and constructing granite / trap / basalt size stone masonry in superstructure with cement mortar 1:4, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, scaffolding, curing complete as per specifications and directions of the Engineer in charge.	Cum
22	Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications and directions of the Engineer in charge.	Sqm
23	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications and directions of the Engineer in charge.	Cum
24	Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per specifications and directions of the Engineer in charge.	Cum
25	Providing and fixing M.S.Grill over existing compound wall as per Chief Architect drawing No. 12686, using 16mm x 16mm M.S. Square rod at 150mm c/c spacing and 6mm x 40mm M.S. flats at horizontal and 6mm x12mm M.S. flat for ornamental design and providing shop edge design at the vertex of every vertical rods, including welding, grinding wherever necessary. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, etc., complete as per specifications and directions of the Engineer in charge.	Sqm
26	Providing and removing centering, shuttering, strutting, propping etc. and Removal of form Work for columns, pillars, piers, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specifications and directions of the Engineer in charge.	Sqm

-	-	-	44.46	564.67	25105.23	44.46	25105.21
-	-	-	59.96	482.01	28901.32	59.96	28901.32
-	-	-	10.55	2607.58	27509.97	10.55	27509.97
-	-	-	25.72	5575.86	143411.12	25.72	143411.12
-	-	-	18.38	5719.71	105128.26	18.38	105128.26
-	-	-	20.95	4933.90	103365.21	20.95	103365.21
-	-	-	16.79	6446.49	108236.57	16.79	108236.57
-	-	-	16.91	152.44	2577.76	16.91	2577.76
-	-	-	2.73	215.78	589.08	2.73	589.08
-	-	-	57.23	68.82	3938.56	57.23	3938.56
-	-	-	200.88	5763.73	1157818.08	200.88	1157818.08
-	-	-	34.68	489.53	16976.90	34.68	16976.90

27	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for suspended floors, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specifications for heights more than 3.50m from ground level. - 0 to 5 mtrs.	Sqm
28	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floors including cost of all materials, labour complete as per specifications and directions of the Engineer in charge	Sqm
29	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specifications and directions of the Engineer in charge	Sqm
30	Providing and removing centering shuttering, strutting, propping etc., for chajjas, corbels etc., including edges including cost of all materials, labour complete as per specifications and directions of the Engineer in charge. Second Floor	Sqm
31	Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @ 0.47cum, with superplasticiser @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in ground Floor level for roof slabs, staircase, lintels, beams, retaining walls, return wall, walls (an thickness) including attached plasters, columns, pillars, posts, struts, butters, string or lacing courses, parapets coping bed blocks, anchor blocks, plain window cills, fillets including cost of all materials, labour, HOM of machinery, curing, complete as per specifications and directions of the Engineer in charge. Second Floor	Cum
32	Providing and laying cement concrete using 20 mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for R.C.C works laid in 15 cms thick layers and well compacted including vibrating, curing, etc for all super Structure works with all lead and Lift etc. complete as per specifications and directions of the Engineer in charge. Second Floor	Cum
33	KSRB 4.2.11 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 27.20kgs, with 12mm and down size graded granite metal coarse aggregates @0.5865cum and fine aggregates @ 0.391cum, with superplasticiser @0.225lts, machine mixed, well compacted for plain chajja of 8.5 cms. average thickness, upto First Floor level, including cost of all materials, labour, HOM of machinery, finishing, curing, Second Floor complete as per specifications. Specification No. KBS 4.1, 4.6 Pg No.15 Item no.4.20	Sqm
34	KSRB 4.9.2 : Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications and directions of the Engineer in charge. Second Floor	tonne
35	Fabricating, supplying and erecting M.S. Tubular Truss of span upto 10m. The bottom and top member is provided with 50x50x6mm double equal angles, welded back to back and in between top and bottom line, in areas of mid section is provided with 50x50x6mm equal single angle for vertical and inclined members and at supporting ends 40x40x5mm single angle is provided. All the members are welded together with 6mm gusset plate as per Drawing. The entire truss is anchored in RCC column by using 4 Nos. of M.S. anchor bolts at each support, with 10mm thick base plate and shoe plate. The work includes cutting, straightening, placing in position of M.S. angle and welding wherever necessary and applying one coat of red oxide primer coat to all the members including cost of all materials, labour charges, and hire charges of machineries for cutting, welding, grinding and erection equipments, with all lead and lift, transportation, etc., complete as per specifications and directions of the Engineer in charge.	kgs
36	PROVIDING TRAPEZOIDAL PROFILED SHEET Providing and installing of pre painted Galvalume iron Trapezoidal profiled sheet of approved make 1060 mm width (1000 mm cover width), 28-30 mm crest height with crest distance of 200 mm c/c with 2 ribs at the centre for stiffening. The total coated thickness (TCT) of the sheet will be 0.47 mm +/- 0.02 mm tolerance Zinc-Alu Alloy coating AZ150 gsm as per ASTM 1397/A755-550 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 20-22 microns using self drilling/self tapping screws of 25 mm length, to be fixed over the existing purlins, rafters, channels and trusses complete as per specifications and directions of the Engineer in charge	Sqm

-	-	-	102.96	429.49	44220.29 44212.05	102.96	44220.29 44212.05
-	-	-	6.30	810.51	5106.21	6.30	5106.21
-	-	-	69.42	313.47	21761.09	69.42	21761.09
-	-	-	6.36	346.75	2205.33	6.36	2205.33
-	-	-	3.68	6618.25	24355.16	3.68	24355.16
-	-	-	22.20	5901.14	131005.30	22.20	131005.30
-	-	-	5.04	543.20	2737.72	5.04	2737.72
-	-	-	3.95	77789.41	307268.17	3.95	307268.17
-	-	-	420.65	138.48	58251.61	420.65	58251.61
-	-	-	17.64	757.91	13369.53	17.64	13369.53

37	Providing and constructing load bearing wall with solid concrete blocks of size 400X200X200mm having block density not less than 1800kg/m ³ having a minimum average compressive strength 5.00N/mm ² conforming to IS 2185 (part 1) 2005 and constructed with cement mortar 1:4, as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications and directions of the Engineer in charge.	Sqm
38	Providing and constructing load bearing wall with solid concrete blocks of size 400X200X200mm having block density not less than 1800kg/m ³ having a minimum average compressive strength 5.00N/mm ² conforming to IS 2185 (part 1) 2005 and constructed with cement mortar 1:4, as per IS 2572:2005 including cost of materials, labour charges, scaffolding, curing, hire charges of machineries etc. complete as per specifications and directions of the Engineer in charge. Second Floor.	Sqm
39	Providing and constructing non-load bearing wall with solid concrete blocks of size 400X100X200 having a block density not less than 1800kg/m ³ having a minimum average compressive strength of 4.00 N/mm ² conforming to IS : 2185 (Part 1) : 2005 and constructed with CM 1:4, as per IS 2572 2005 including cost of all materials, labour charges, scaffolding, curing, hire charges of machineries etc. complete as per specifications and directions of the Engineer in charge., Second Floor	Sqm
40	Providing and constructing non-load bearing wall with solid concrete blocks of size 400X100X200 having a block density not less than 1800kg/m ³ having a minimum average compressive strength of 4.00 N/mm ² conforming to IS : 2185 (Part 1) : 2005 and constructed with CM 1:4, as per IS 2572 2005 including cost of all materials, labour charges, scaffolding, curing, hire charges of machineries etc. complete as per specifications and directions of the Engineer in charge. Third Floor	Sqm
41	Providing 18mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherever required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing Ground Floor complete as per specifications and directions of the Engineer in charge.	Sqm
42	Providing 18mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherever required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and directions of the Engineer in charge. Second Floor	Sqm
43	Providing 18mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherever required smooth rendering, Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and directions of the Engineer in charge. Third Floor	Sqm
44	Providing 12mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and directions of the Engineer in charge. Second Floor	Sqm
45	Providing 12mm thick cement plaster in single coat with cement mortar 1:4, to ceiling including rounding off corners wherever required smooth rendering, : including Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and directions of the Engineer in charge. Second Floor	Sqm
46	Providing applying two coats of wall putty to inside plastered walls and ceiling using white cement putty Scrapping and levelling the surface using steel blade and preparing the surface even and smooth by using different grade sand papers, including cost of all material cost of labour and scaffolding etc., complete as per specifications and directions of the Engineer in charge.	Sqm
47	Providing and applying painting in two coats with plastic emulsion paint of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications and directions of the Engineer in charge.	Sqm
48	Providing and applying two coats with oil bound washable distemper of approved brand and shade on wall surface including priming coat with distemper primer after thoroughly brooming the sand paper smooth, cost of materials, labour, complete as per specifications and directions of the Engineer in charge	Sqm
49	Providing external walls with texture finish using approved brand paint, applied uniformly in three coats over one coat of primer including cost of all materials, machineries, labour, transportation, loading and unloading, all lead and lift and all other incidental charges including scaffolding and removing stains, complete as per specifications and directions of the Engineer in charge. Ground Floor	Sqm

-	-	-	40 32	979 05	39475.30 ^{.29}	40 32	39475.30 ^{.29}
-	-	-	88 70	1054.2	93507.54	88 70	93507.54
-	-	-	7 20	945.77	6809.54	7.20	6809.54
-	-	-	54 36	983.34	53454.36	54 36	53454.36
-	-	-	80 64	280.19	22594.52	80 64	22594.52
-	-	-	118.68	305.95	36310.15 ⁺	118.68	36310.15 ⁺
-	-	-	108.72	318.84	34664.28	108.72	34664.28
-	-	-	114.96	231.88	26656.92	114.96	26656.92
-	-	-	103.78	254.42	26403.71 ⁰	103.78	26403.71 ⁰
-	-	-	218.74	83.73	18315.10	218.74	18315.10
-	-	-	114.96	96.62	11107.44 ⁵	114.96	11107.44 ^{.43}
-	-	-	103.78	126.68	13146.85	103.78	13146.85
-	-	-	716.52	365.0	261529.80	716.52	261529.80

50	Providing external walls with texture finish using approved brand paint, applied uniformly in three coats over one coat of primer including cost of all materials, machineries, labour, transportation, loading and unloading all lead and lift and all other incidental charges including scaffolding and removing stains, complete as per specifications and directions of the Engineer in charge. Second Floor	Sqm
51	Providing and laying Hassan Green / River Pink granite flooring for staircase, treads and rises using pre polished 20 mm thick water cut green Granite slab laid over existing cement concrete bed in CM 1:3, average 20mm thick including full rounding for nosing, cutting 3 line grooves not more than 2 mm wide for antiskidding including cost of all materials mortar,labour,curing etc., complete as per specifications and directions of the Engineer in charge.	Sqm
52	Providing and laying M-15 cement concrete flooring 50 mm thick with metallic concrete hardner topping under layer of 35mm thick m-15 cement concrete using broken granite metal of 20mm and down size and top layer 50mm thick of metallic cement hardner consisting of mix 1:2 (1 part of cement and 2 parts of granite metal 10mm nominal size) by volume with which metallic cement hardner mix 2 granite metal 10mm nominal size) by volume with which metallic hardening compound of approved quality mix in the ratio of 4 : 1 (4 part of cement and 1 part of metallic floor hardening compound of approved quality by wt) , including finishing cost of materials labour curing complete as per specifications and directions of the Engineer in charge. Second Floor	Sqm
53	Providing and fixing Vetrified glazed tiles of approved make quality & colour of size 900x900x12mm thick fixed on bed of 12mm thick cement mortar for flooring skirting ad jointed with neat cement slurry mixed with pigment to match shade of tiles, including providing spacers at required interval and removing stains etc including Cost of all materials mortar labour etc complete as per specifications and directions of the Engineer in charge. Second Floor	Sqm
54	Providing and laying integral cement based waterproofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc., consisting of following application (a) Applying and grouting a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with proprietary water proofing compound conforming to IS 2645 over the RCC slab after cleaning the surface before treatment (b) Laying cement concrete using broken brick bats 25mm to 100mm size with 50% of cement mortar 1:5 admixed with proprietary water proofing compound conforming IS 2645 over 20mm thick layer of cement mortar 1:5 admixed with proprietary water proofing compound to required slope and treating similarly the adjoining walls upto 300mm height including rounding off junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement lurry admixed with proprietary water proofing compound (d) Finishing the surface with 20mm thick jointless cement mortar of mix 1:4 admixed with proprietary water proofing compound and finally finishing the surface with trowel and neat cement slurry and making of 300x300mm square (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test including cost of materials, labour complete as per specifications and directions of the Engineer in charge.	Sqm
55	Fixing of door frames in an existing opening including embedding frame in floor and walls after cutting masonry for holdfasts for embedding holdfast in cement concrete 1:3:6 of 20mm and downsize granite metal painting two coats of coal tar to sides of frame,making good the damages to walls and floor as required and disposal of the debries with lead upto 50 m. including cost of materials, labour complete as per specifications and directions of the Engineer in charge. Second Floor	Nos
56	Providing Honne wood frames of doors, windows, clerestory windows,ventilators and other frames wrought framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps),but including cost of materials, labour, HOM of machineries complete as per specifications and directions of the Engineer in charge. Second Floor	Cum
57	Providing and fixing in position fully panelled Honne wood shutters for doors, styles and rails of 40mm thick with bottom and lock rails 180mm wide top rail and styles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, HOM of machineries complete as per specifications and directions of the Engineer in charge. Second Floor	Sqm
58	Providing and applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface with enamel paint to give an even shade, cleaning the surface of all dirt, dust and foreign matter, sand papering including cost ofmaterials, labour, complete as per specifications and directions of the Engineer in charge	Sqm

-	-	-	227.40	382.17	86905.46 ^{.45}	227.40	86905.46 ^{.45}
-	-	-	53.20	4783.61	254488.05	53.20	254488.05
-	-	-	89.74	681.69	61174.86	89.74	61174.86
-	-	-	100.58	1224.89	123199.44 ^{.43}	100.58	123199.44 ^{.43}
-	-	-	162.24	1067.08	173123.06 ^{.05}	162.24	173123.06 ^{.05}
-	-	-	2.00	1466.43	2932.86	2.00	2932.86
-	-	-	0.23	94044.65	21630.27 ^{.26}	0.23	21630.27 ^{.26}
-	-	-	4.20	5077.75	21326.55	4.20	21326.55
-	-	-	4.96	104.13	516.48	4.96	516.48

59	Pre-painted steel windows / ventilators & door frames. Supply and fixing of windows and top hung and fixed louered ventilators made of pre-painted steel (base steel as per IS 513 of -0.58mm thick 'D' quality, galvanized as per IS 277 with zinc of 120 GSM) with apolyester paint, of 12-16 microns thick and back coated with 5-7 micronsthick alkyd backer. Section for outer frame should be 46x52mm, sectionfor shutter should be 46x46mm section for mullion should be 46x70mm, and section for beading should be 18x25mm and section for louered ventilator should be 33x57mm for the windows hould be pannaed with 5 mm thick plain float glass and 4mm pinhead glass for ventilators with rubber Gasket. The sections are to be cut to length, mitre joined with corner bracket and centre mullions are to be fixed using mullion cap. Handle made of high grade aluminium powder coated and nylon receiver. Corner brackets made of CRCA with Zinc Phosphate. Mullion caps made of glass filled nylon. The above frames should be ixed to the concrete/ masonry will by means of self-expanding screws. Including 10mm square bars with 6" pitch complete finished item of work. Double shutter 3'-0" X 4' - 0" (914 4MM x 1219 2 MM) outer frame section size of 46x52mm shutter frame section size of 46x46mm complete as per specifications and directions of the Engineer in charge	Sqm
60	Providing and fixing M S grill work for windows and ventilators weighing 21kg/sqm using M.S. flats, or M S square rods, or combination of M S flats and square rods as per approve design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM of machinery complete as per specifications and directions of the Engineer in charge	kg
61	Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter including cost of materials, labour, complete as per specifications and directions of the Engineer in charge	sqm
62	Providing and fixing M S Hand railing for Balcony with 50mm dia. M.S. hollow pipe of 14 gauge, welded to 20mmx20mm M S square rod placed vertically, spaced at 100mm at regular intervals of 600mm. These vertical rods laterally tied to 3 horizontal rods spaced at equal interval. These assembly is fixed to concrete by using expansion bolts and welding the same to reinforcement bars and making good the surface. All the joints and sections hould be cut to length, welded and grinded wherever necessary etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, etc., complete as per specifications and directions of the Engineer in charge.	Sqm
63	Door Frame - Entrance. Providing & fixing factory made Galvanized plain steel door frame of profile size 125 x 60 mm single rebate manufactured from galvanized plain steel sheet 1.25 mm thick conforming to IS 277. The door frame consists of hinge jamb, lock jamb, head & bottom tie bars supply in knockdown condition & to be assembled at site by mechanical means with special mitre joint. The bottom tie bar made out of galvanized plain steel sheet 1.60 mm thick pressed angle 20 x 20 mm screwed to the door frame. The stiffeners of 3 mm thick pre-punched & pre-trapped are to be welded inside the pre-punched slots of the door frames & 4 nos. of S.S. butt hinges 100 x 59 x 2.5 mm to be screwed to the door frame. The necessary stiffeners & mortar guards to be provided for fixing hardware fixtures. The door frame to be powder coated after pre-treatment of the surface. The door frame shall be filled with 1:3:6 cement concrete & to be fixed with adjustable lugs/ hold fasts. Alternatively, dry fixing shall be permitted by using metallic expansion bolt. The rate is including transportation, loading, unloading, HOM etc. but excluding the hardware fixtures size 1000 x 2130 mm complete as per specifications and directions of the Engineer in charge	Rmt
64	Door Shutters Entrance. Providing & fixing factory made Galvanized steel door Shutters 32 mm thick manufactured from pre-painted Galvanized plain steel sheet 0.60 mm thick conforming to the IS 14246. The door shutters consist of two outer skins if steel sheets, lock seam jointed at vertical stile edges horizontal top & bottom sides to form a double skin fully flush shell. Rigid for structure rigidly & sound insulation. The necessary stiffeners of the Galvanized plain steel sheet of minimum thickness 1.60 mm to be provided for fixing all hardware fixtures. The rate is including transportation, loading, unloading, HOM etc but excluding the hardware fixtures. The rate is 900 x 2035 x 32 mm thick complete as per specifications and directions of the Engineer in charge	Sqm
65	Providing and fixing C P brass towel rail 740mm length, 20mm dia with C P brackets, fixed to wooden cleats with C P brass screws including cost of materials, labour complete as per specifications and directions of the Engineer in charge	Unit

-	-	10.80	4137.35	44683.38	10.80	44683.38
-	-	226.80	114.87	26052.52 ⁵¹	226.80	26052.52 ⁵¹
-	-	97.20	101.98	9912.46 ⁴⁵	97.20	9912.46 ⁴⁵
-	-	10.80	3061.68	33066.14	10.80	33066.14
-	-	28.80	585.07	16850.02 ⁰¹	28.80	16850.02 ⁰¹
-	-	21.00	2297.33	48243.93	21.00	48243.93
-	-	2.00	793.33	1586.66	2.00	1586.66

66	Providing and fixing 7.5 cms to 15.00 cms dia NP grating 100 mm dia. complete as per specifications and directions of the Engineer in charge.	Each
67	Providing and fixing to wall, ceiling and floor unplasticised PVC 6.00 kgs/sqcm working pressure with pipe fittings, wall clips etc., and making good the wall, ceiling and floor for sanitary pipelines including cost of all materials, labour charges, HOM of acquirements and testing complete as per specifications and directions of the Engineer in charge.	Rmt
68	Providing and fixing to wall, ceiling and floor unplasticised PVC 6.00 kgs/sqcm working pressure with pipe fittings, wall clips etc., and making good the wall, ceiling and floor for sanitary pipelines including cost of all materials, labour charges, HOM of acquirements and testing complete as per specifications and directions of the Engineer in charge.	Rmt
69	Constructing brick masonry inspection chamber 600x600mm, and 450mm depth, (clear inside dimension) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover with frame (light duty) 455x610mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23kg and weight of frame 15 kg) R C C top slab with cement concrete M 15 with 20mm and downsize granite metal, foundation concrete M 5 with 40mm and downsize granite metal inside plastering 12mm thick with cement mortar 1:3, finish smooth with a floating coat of cement on walls and bed concrete complete as per standard design including cost of materials, labour charges, curing complete as per specifications. Specification No. KBS 600x600mm and 450mm depth (clear inside dimension) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover with frame (light duty) 600x600mm, complete as per specifications and directions of the Engineer in charge.	Nos
70	Providing and placing on terrace, polyethylene water storage tanks with manhole lid and suitable locking arrangements, making holes of suitable diameter for inlet, outlet and over flow pipes, including cost of all materials, labour, transport charges, HOM of equipments and testing complete as per specifications and directions of the Engineer in charge.	Each
71	Providing and fixing in position brass bib cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications and directions of the Engineer in charge.	Each
72	Providing and fixing in position brass stop cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications and directions of the Engineer in charge.	Each
73	Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications and directions of the Engineer in charge.	Each
74	Providing and fixing Chlorinated Poly Vinyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) complete as per specifications and directions of the Engineer in charge.	Rmt
75	Providing and fixing Chlorinated Poly Vinyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) complete as per specifications and directions of the Engineer in charge.	Rmt
76	Supplying, installing, testing and commissioning electrically driven jockey pump of capacity 180.0 Lpm at 70.0m head with all the necessary accessories viz. Pressure gauges etc. operating on 3Ph 50Hz, 400/440 V AC supply including foundation, bolts etc. complete as per specifications and directions of the Engineer in charge.	Nos
Sub Total		
Deduct for amount towards auction of dismantled materials		
Net Total		
GST @ 12%		
Total		

CERTIFICATE

I. Certified that the above work done satisfactory and no materials issued from Department

[Signature]

-	-	-	12.00	161.03	1932.36	12.00	1932.36
-	-	-	90.00	465.91	41931.90	90.00	41931.90
-	-	-	40.00	915.71	36628.40	40.00	36628.40
-	-	-	3.00	9114.18	27342.54	3.00	27342.54
-	-	-	1.00	7329.99	7329.99	1.00	7329.99
-	-	-	12.00	185.72	2228.64	12.00	2228.64
-	-	-	6.00	151.37	908.22	6.00	908.22
-	-	-	3.00	360.70	1082.10	3.00	1082.10
-	-	-	36.00	252.28	9082.08	36.00	9082.08
-	-	-	25.00	314.54	7863.50	25.00	7863.50
-	-	-	1.00	89074.25	89074.25	1.00	89074.25
					4362960.87		4362960.87
				(-)	9500.00		9500.00
					4353460.87		4353460.87
					522415.30		522415.30
					4875876.17		4885376.17

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP, Bangalore.

Round off.

4875876.17
4875000.00

Prakash
JB 28